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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
DWIVEDI, VIKANSHA S	

ART UNIT	PAPER NUMBER
3746	

NOTIFICATION DATE	DELIVERY MODE
08/29/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/776,252

Applicant(s)

CHEN ET AL.

Examiner

Vikansha S. Dwivedi

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-19 and 21-23 is/are rejected.
- 7) ☒ Claim(s) 12, 20 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/23/2007.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 13-19, 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by F. L. Vibber et al (2,925,814).

Vibber et al discloses a pump (shown in figure 3), comprising: a housing (30/19) having an intake (shown in figure 3 on extreme left side) and an output (shown in figure 3 on extreme right side); a conductor (56) movably disposed in the housing (30/19); at least one valve (62 and 70) disposed between the housing (19) and the conductor (56), wherein one end of the valve (70) is connected to the conductor (56, as shown in figure 4); a first coil (40) disposed in the housing (19) and generating a magnetic force attracting the conductor toward the output when electrified such that fluid therebetween flows out of the housing (col. 3 ll. 52-58); and a second coil (44) disposed in the housing (19) and generating a magnetic force attracting the conductor toward the intake when electrified such that fluid therebetween flows between the conductor and the output (col. 3 ll. 52-58); wherein the fluid taken into the housing is stored between the intake and the conductor when the first coil is electrified (figure 3); wherein a first base (37) and a second base (41) both disposed in the housing (19), wherein the first coil is wound around the first base and the second coil is wound around the second base (col. 3 ll. 1-3

Art Unit: 3746

and col. 3 ll. 10-11), further comprising an entrance valve (62) and a exit valve (70), the entrance valve disposed between the intake and conductor (figure 3, 62 is disposed between inlet 12 and conductor 56), and the exit valve disposed between the conductor and the output (figure 3, 70 is disposed between the conductor 56 and outlet 14), wherein the entrance valve opens and the exit valve closes when the first coil is electrified, and the entrance valve closes and the exit valve opens when the second coil is electrified (col. 4 ll. 5-32); wherein the entrance valve and the exit valve are both one-way valves (62 and 70 are oppositely acting check valves); wherein each one-way valve comprises an elastic member (64), a ball (70) and a barricade (71) connected to the elastic member and the ball disposed therebetween (shown in figure 3); wherein an end of the elastic member (64) connects to the conductor (lower end of 56), and another end of the elastic member is disposed between the first and second bases (figure 3); wherein the elastic member (64) connects to the second base (figure 3); wherein the elastic member (64) comprises rubber (see figure 3); wherein the exit valve (70) comprises an elastic member (64), a ball (70) and a barricade (71) connected to the elastic member and the ball disposed therebetween, and an end of the elastic member connects to the conductor and another end to the housing (figure 3); wherein the entrance valve (62) comprises an elastic member (65), a ball (66) and a barricade (67) connected to the elastic member and the ball disposed therebetween, and the elastic member connects to the housing (figure 3), and the entrance valve or the exit valve have at least an elastic member (64), a ball (center of valve designated by numeral 70

in figure 3) and a barricade (71), and the ball is disposed between the elastic member (64) and the barricade (71)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vibber.

Vibber discloses a pump wherein a first coil (44) disposed in the housing (19) and generating a magnetic force attracting the conductor toward the intake when electrified such that fluid therebetween flows between the conductor and the output (col. 3 ll. 52-58); wherein the fluid taken into the housing is stored between the intake and the conductor when the first coil is electrified (figure 3); wherein a first base (37) and a second base (41) both disposed in the housing (19), wherein the first coil is wound around the first base and the second coil is wound around the second base (col. 3 ll. 1-3 and col. 3 ll. 10-11), further comprising an entrance valve (62) and an exit valve (70), the entrance valve disposed between the intake and conductor (figure 3, 62 is disposed between inlet 12 and conductor 56), and the exit valve disposed between the conductor and the output (figure 3, 70 is disposed between the conductor 56 and outlet 14),

Art Unit: 3746

wherein the entrance valve opens and the exit valve closes when the first coil is electrified, and the entrance valve closes and the exit valve opens when the second coil is electrified (col. 4 ll. 5-32); wherein the entrance valve and the exit valve are both one-way valves (62 and 70 are oppositely acting check valves); wherein each one-way valve comprises an elastic member (64), a ball (70) and a barricade (71) connected to the elastic member and the ball disposed therebetween (shown in figure 3); wherein an end of the elastic member (64) connects to the conductor (lower end of 56), and another end of the elastic member is disposed between the first and second bases (figure 3); wherein the elastic member (64) connects to the second base (figure 3); wherein the elastic member (64) comprises rubber (see figure 3); wherein the exit valve (70) comprises an elastic member (64), a ball (70) and a barricade (71) connected to the elastic member and the ball disposed therebetween, and an end of the elastic member connects to the conductor and another end to the housing (figure 3); wherein the entrance valve (62) comprises an elastic member (65), a ball (66) and a barricade (67) connected to the elastic member and the ball disposed therebetween, and the elastic member connects to the housing (figure 3).

With respect to claim 4 Vibber's does not disclose the first and second bases comprise insulating materials. Vibber discloses the claimed invention except for insulating materials. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the first and second bases comprise insulating materials in order to protect the apparatus. It has been held to be within the general

skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

With respect to claim 13 Vibber's does not disclose the housing made out of permeance material. Vibber discloses the claimed invention except for permeance material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the housing of permeance material in order to attach it to lower part 17 without using screws and bolts. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Allowable Subject Matter

Claims 12, 20 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 3746

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vikansha S. Dwivedi whose telephone number is 571-272-7834. The examiner can normally be reached on M-F, 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3746

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

V. Kansha

VSD



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